PSYCHOMETRICIAN

DESCRIPTION OF WORK:

Employees in this class perform technical and professional assignments in the design and development of psychometrically valid and reliable assessments for the statewide public schools testing program. Work is advanced and technical requiring a strong background in psychometrics, statistics, examination publishing and curriculum, and the ability to work in a leadership capacity with lead state agency personnel, local Education agency personnel, and national curriculum and measurement specialists to develop a wide range of tests. Work requires choosing and applying complex statistical procedures unique to test development, as well as production of psychometrically acceptable reports and studies. May perform related work as required.

EXAMPLES OF WORK FUNCTIONS:

<u>Test Design and Measurement</u> - Designs, plans and produces achievement tests for grades 3-12 in an assigned subject matter area; develops specifications and provides oversight for external contractors; sets test content and psychometric standards for item and test development; and determines alternative/alternate forms of assessment and monitors the development of items and tests for traditional and non-traditional instruments and other evaluation measures.

<u>Data Collection and Analysis</u> - Reviews results of tests administered in his/her assigned area and performs analyses on results, including individual item responses and response patterns. Identifies potential problem areas and recommends adjustments as necessary. Performs statistical analyses for reliability and validity measures, and completes studies according to accepted psychometric standards. Plans, conducts and implements special research studies. Provides appropriate analyses related to setting achievement standards.

<u>Communication</u> - Formulates and monitors advisory groups concerning curriculum and evaluation issues. Clearly and concisely conveys information verbally and in written form; effectively presents ideas to individuals or groups to ensure that they understand the issues and information. Presents program results and summaries; adheres to psychometrically sound principles; and authors professional research publications and reports. Makes professional presentations.

RECRUITMENT STANDARDS:

Knowledge, Skills, and Abilities

Thorough professional skill and/or knowledge in psychometrics and the appropriate subject matter area of assignment.

Thorough knowledge of federal, state and national guidelines, regulations and objectives pertaining to the assessment and reporting of student performance data.

Thorough knowledge of classical and item response theory, statistics, and publishing.

Ability to keep current with professional development and trends.

Minimum Education and Experience

A Master's degree in Tests and Measurement, Education Research, Education/Quantitative Psychology and Statistics, or Statistics, and three years of directly related experience needed to perform the work; or an equivalent combination of education and experience.

All degrees must be received from appropriately accredited institutions.

Special Note

This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA. Examples of work are primarily essential functions of the majority of positions in this class but may not be applicable to all positions.

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